

ABSTRACT OF THE DISCLOSURE

In a high-frequency coil device having small dispersion in coil inductance and suitable for use in GHz band and a method of manufacturing the high-frequency coil device, a spirally-shaped fine-pitch coil is embedded in the surface of a polyimide layer as a dielectric substrate so that the bottom surface and side surface of the coil is covered by the polyimide layer. The spirally-shaped coil has an Ni-Cu laminate structure in which an Ni plating layer and a Cu plating layer are laminated, and also the side surface thereof is made substantially vertical while the width thereof is uniform with high precision. The surface of the spirally-shaped coil, that is, the surface of the Ni plating layer serving as the upper layer is coated with an Au plating layer.